

Name: \_\_\_\_\_

**p1106: Solve by factoring (v5)**

1. Solve the equation

$$x^2 - 81 = 0$$

$$(x + 9)(x - 9) = 0$$

$$x = 9$$

$$x = -9$$

2. Solve the equation

$$x^2 - 2x - 15 = 0$$

$$(x + 3)(x - 5) = 0$$

$$x = 5$$

$$x = -3$$

3. Solve the equation

$$5x^2 + 2x + 24 = 4x^2 - 7x + 6$$

$$x^2 + 9x + 18 = 0$$

$$(x + 6)(x + 3) = 0$$

$$x = -3$$

$$x = -6$$

4. Solve the equation

$$6x^2 + 25x + 66 = 5x^2 + 8x - 6$$

$$x^2 + 17x + 72 = 0$$

$$(x + 9)(x + 8) = 0$$

$$x = -8$$

$$x = -9$$

5. Solve the equation

$$3x^2 + 5x - 10 = 2x^2 - x + 6$$

$$x^2 + 6x - 16 = 0$$

$$(x + 8)(x - 2) = 0$$

$$x = 2$$

$$x = -8$$

6. Solve the equation

$$5x^2 - 49x + 36 = 0$$

$$(5x - 4)(x - 9) = 0$$

$$x = 9$$

$$x = \frac{4}{5}$$

7. Solve the equation

$$2x^2 - 13x + 18 = 0$$

$$(2x - 9)(x - 2) = 0$$

$$x = 2$$

$$x = \frac{9}{2}$$

8. Solve the equation

$$19x^2 + 73x + 35 = 8x^2 + x - 1$$

$$11x^2 + 72x + 36 = 0$$

$$(11x + 6)(x + 6) = 0$$

$$x = -6$$

$$x = \frac{-6}{11}$$

9. Solve the equation

$$4x^2 - 17x + 24 = 2x^2 + 4x - 3$$

$$2x^2 - 21x + 27 = 0$$

$$(2x - 3)(x - 9) = 0$$

$$x = 9$$

$$x = \frac{3}{2}$$

10. Solve the equation

$$19x^2 - 43x + 15 = 8x^2 - 7x + 6$$

$$11x^2 - 36x + 9 = 0$$

$$(11x - 3)(x - 3) = 0$$

$$x = 3$$

$$x = \frac{3}{11}$$